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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MEINECKE DIAZ, SUSANNA M	
ART UNIT	PAPER NUMBER
3694	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/905,258	SANKARAN ET AL.	
	Examiner	Art Unit	
	Susanna M. Diaz	3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-13,15-25,27-35 and 37-61* is/are pending in the application.

4a) Of the above claim(s) *1,3-13,15-24,46,48,50 and 51* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25,27-35,37-45,47,49 and 52-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 12, 2007 has been entered.

Claims 25, 35, 45, 47, and 49 have been amended.

Claims 58-61 have been added.

Non-elected claims 1, 3-13, 15-24, 46, 48, 50, and 51 stand as withdrawn.

Claims 25, 27-35, 37-45, 47, 49, and 52-61 are presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claims 25, 27-35, 37-45, 47, 49, and 52-61 have been considered but are moot in view of the new ground(s) of rejection under 35 U.S.C. § 112, 2nd paragraph (necessitated by Applicant's claim amendments).

Furthermore, Applicant argues that the art rejection does not address a hierarchy as "a collection organized into ranks, grades, or orders." (Page 15 of Applicant's response) The Examiner submits that the word *hierarchy* is very broad in scope and is subject to various interpretations, especially since Applicant provides no special definition for this word in the original disclosure. As a matter of fact, the web site

http://www.dictionary.com lists further definitions of the word *hierarchy*, including "a series of ordered groupings of people or things within a system" and "an organisation [sic] with few things, or one thing, at the top and with several things below each other thing. An inverted tree structure." Figures 1-3 clearly show such an ordering and tree structure. Columns 9-12 explain the contents of these hierarchies in more details.

In conclusion, Applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25, 27-35, 37-45, 47, 49, and 52-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites that "the product data hierarchy includes a first tier and a second tier, wherein the first tier includes one or more nodes and wherein the second tier includes one or more nodes, wherein each node in the second tier is associated with at least one node in the first tier." It is not clear what each tier and each node represent. Additionally, the fact that the hierarchy has two tiers with at least one node in each tier has no effect on the claimed invention as a whole. As a matter of fact, the details of the hierarchy are outside the scope of the invention. For example, the identifying and selecting steps are not altered based on the number of tiers or nodes in the hierarchy. Similarly, the last step of "allowing the particular user to access forecast data for the set

of one or more customers for each product from the set of one or more products" is not affected by the particular arrangement of the hierarchy. For example, the number of tiers or nodes in the hierarchy does not readily change how a user accesses data, at least within the scope of the claim. Claim 25 effectively allows a user to select a product from a plurality of product nodes, which means that a user selects a product from a plurality of products. There is no correlation between the various tiers/nodes and the products. Additionally, what is it about the nodal characteristics that facilitates selection of each product?

The same amendment has been made to independent claim 35; therefore, the same rejections (applied to claim 25) apply. A similar amendment has been made to independent claim 45; however, the tiers are described as "customer" tiers and the nodes have been described as "product" nodes. Nevertheless, the scope of "customer" tiers and "product" nodes is not clearly defined; therefore, "customer" and "product" merely serve as non-functional labels of the tiers and nodes and, consequently, the same rejections (applied to claim 25) apply. The same amendment has been made to independent claim 49; therefore, the same rejections (applied to claim 25) apply. Additionally, claim 49 has been amended to specify that "the second plurality of tiers includes a third tier and a fourth tier, wherein the third tier includes one or more nodes and wherein the fourth tier includes one or more nodes, wherein each node in the fourth tier is associated with at least one node in the third tier." This amendment is analogous to the amendment made respectively to the first and second tiers and nodes; therefore,

the same § 112 issues raised by the first and second tiers and nodes are applicable to the third and fourth tiers and nodes.

Independent claims 25, 35, 49, and 61 recite the step of "allowing the particular/first user to access forecast data..." The scope of "allowing" is vague and indefinite since "allowing" only implies permission to perform the associated action. It is not clear if "allowing" a user to access forecast data means that the user actively accesses the forecast data or is only capable of accessing the data, for example.

Independent claim 45 recites "a processor communicatively coupled to the storage device and being configured to process the customer hierarchy data and the products hierarchy data to control access to forecast data." The phrase "configured to" is indicative of intended use and does not require that the associated functionality actively be performed; therefore, it is not clear if the intended scope of the claim requires that the processor actively process the customer hierarchy data and the products hierarchy data to control access to forecast data.

Claims 58 and 59 recite that "the second tier includes a product line" and "the product line includes zero or more product nodes." If the product line includes zero nodes, then the second tier effectively possesses no product line, thereby negating this limitation in claims 58 and 59. In other words, claims 58 and 59 recite conflicting limitations, thereby rendering the scope of the claims vague and indefinite.

Claim 60 is dependent from claim 45 and recites that "the first customer tier includes a region level, and wherein the second customer tier includes a country level that includes at least one customer node, and wherein the first product tier includes a

product family level, and wherein the second product tier includes a line level that includes at least one product node." While the tiers are defined as various levels and nodes, it is still not clear what the content of these tiers, levels, and nodes is. More particularly, how does the specific content aid in achieving the result of the claimed invention (i.e., processing the customer hierarchy data and the products hierarchy data to control access to forecast data)? Consequently, the fact that each tier includes a respective level has no effect on the claimed invention as a whole and the details of the tiers and levels are outside the scope of the invention, thereby raising questions regarding the metes and bounds of the claimed invention.

Claim 61 recites the step of "identifying, from a plurality of products, one or more products associated with a particular user, wherein identifying includes selecting one or more product nodes from a plurality of product nodes arranged in a product data hierarchy, wherein the product data hierarchy includes a product family tier and a product line tier, wherein each node in the product line tier is associated with one or more nodes in the product family tier." Again, the details of how the hierarchy is formed do not affect the steps of identifying or allowing and are outside the scope of the invention. The identifying and allowing steps rely on the identification of a product associated with a user and are unaffected by how the product data is arranged in a hierarchy. Consequently, the scope of claim 61 is vague and indefinite since it is not clear what Applicant's intended claim coverage is.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 25, 27-35, 37-45, 47, 49, and 52-61 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)*). In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson, 409 U.S. at 71-72, 175 USPQ at 676-77*). Additionally, a claim may not preempt abstract ideas, laws of nature or natural phenomena nor may a claim preempt every "substantial practical application" of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions themselves (*Gottschalk v. Benson, 409 U.S. 63, 71-72 (1972)*). (Please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.)

While the ability to access forecast data is useful and concrete, claims 25, 27-35, 37-45, 47, 49, and 52-61 only allow a user or are configured to allow a user to access forecast data. Since the forecast data may or may not actually be accessed by the

user, the tangibility of the invention is not expressly required. Since one possible interpretation of the claimed invention requires merely the possibility of a user accessing forecast data without the user actively taking advantage of this permission, the claimed invention fails to consistently produce a tangible result.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 25, 27-35, 37-45, 47, 49, and 52-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sultan (U.S. Patent 6,804,657) in view of Mentzer et al. (Mentzer et al., Benchmarking Sales Forecasting Management, Business Horizons, May-June 1999, p. 48-56 [GOOGLE]).

As to claims 25, 27-35, and 37-44, Sultan discloses an approach for managing forecast data comprising a method for managing forecast data by identifying, from a plurality of customers, a set of one or more customers associated with a particular user; selecting a set of one or more products from a plurality of products; and allowing the particular user to access forecast data for the set of one or more products for each customer for the set of one or more customers; and by identifying, from a plurality of products, a set of one or more products associated with a particular user; and selecting

a set of customers from a plurality of customers. Specifically, Sultan teaches generating a real time global sales forecast for a company that includes the steps of defining a hierarchical structure for a sales force of the company and defining a place within the structure for each member thereof. Original pipeline sales information may then be remotely entered by members of the sales force tagged to the customer, to the relevant product and/or services and to that member of the sales force having entered it. Pipeline sales information is defined as the value of the goods and/or services that the sales person believes he or she will sell to a given customer over a specified period of time. Each member of the sales force is assigned a permission level that determines what information is available to each person within the sales force and in particular, what forecast information is visible, accessible and/or modifiable to and by each person. The rolled up pipeline and/or forecast information may represent a Regional Manager's rolled up forecast to include all those directly or indirectly reporting to him; or may represent anticipated sales across product lines or for a single product, for any period for which pipeline information exist (Abstract, col. 5, lines 13-31, col. 6, lines 27-48 and col. 11, lines 9-26). Sultan fails to teach allowing the particular user to access forecast data for the set of one or more customers for each product for the set of one or more products. Mentzer et al. teach a functional integration stages where in stage 1, marketing wants yearly products line forecasts and sales wants quarterly forecasts by salesperson territory. To improve, integration requires that common goal setting with regard to forecasting be encouraged across functional areas through communication and company-wide information access. In forecasting approach stage 4, companies

fully realize that top-down and bottom-up forecasting approaches are interdependent rather than independent processes. Thus, any changes to one forecast are reconciled with forecasts at the same level from the other approach. To improve the forecasting approach, companies should investigate the possibility of segmenting out key customers and forecasting them separately. Products can also be segmented, with the segments divided according to their demand partners, importance to the company, responsiveness to demand promotions, life cycle stage, shelf life, value, customer service sensitivity, and raw material and production order lead times. To improve forecasting systems, customers should move to a client-server architecture, which abolishes the "islands of analysis" and allows all the functional areas involved in or affected by the forecast to have access and input into the process (para 10, 27, 32, 38). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the recommendations of Mentzer et al. with the teachings of Sultan since Sultan teaches generating real time sales forecasts upon demand (col. 2, lines 8-37). Accuracy of sales forecast allows companies to respond quickly to today's ever-changing customer demand. Having up-to-the minute forecasting capabilities, corporations and managers are able to flexibly allocate human and physical resources where they will be most effective and identify and anticipate trends in the marketplace (Sultan: col. 12, lines 24-29). Forecasting performance evaluation is still based on accuracy, but with more recognition that accuracy affects inventory levels, customer service, and marketing and financial plans (Mentzer et al.: Figure 7, Stage 3). Both Sultan and Mentzer et al. teach sales forecasting, therefore

there is motivation to combine with a reasonable expectation of success, and the features of the invention are taught by the combination of Sultan and Mentzer et al.

Claims 45, 47, 49, and 52-61 recite limitations already addressed by the rejection of claims 25, 27-35, and 37-44 above; therefore, the same rejection applies.

Additionally, claim 25 recites that "the product data hierarchy includes a first tier and a second tier, wherein the first tier includes one or more nodes and wherein the second tier includes one or more nodes, wherein each node in the second tier is associated with at least one node in the first tier." The fact that the hierarchy has two tiers with at least one node in each tier has no effect on the claimed invention as a whole. As a matter of fact, the details of the hierarchy are outside the scope of the invention. For example, the identifying and selecting steps are not altered based on the number of tiers or nodes in the hierarchy. Similarly, the last step of "allowing the particular user to access forecast data for the set of one or more customers for each product from the set of one or more products" is not affected by the particular arrangement of the hierarchy. For example, the number of tiers or nodes in the hierarchy does not readily change how a user accesses data, at least within the scope of the claim. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art.

The same amendment has been made to independent claim 35; therefore, the same analysis (applied to claim 25) applies. A similar amendment has been made to independent claim 45; however, the tiers are described as "customer" tiers and the nodes have been described as "product" nodes. Nevertheless, the scope of "customer"

tiers and "product" nodes is not clearly defined; therefore, "customer" and "product" merely serve as non-functional labels of the tiers and nodes and, consequently, the same analysis (applied to claim 25) applies. The same amendment has been made to independent claim 49; therefore, the same analysis (applied to claim 25) applies. Additionally, claim 49 has been amended to specify that "the second plurality of tiers includes a third tier and a fourth tier, wherein the third tier includes one or more nodes and wherein the fourth tier includes one or more nodes, wherein each node in the fourth tier is associated with at least one node in the third tier." This amendment is analogous to the amendment made respectively to the first and second tiers and nodes; therefore, the same analysis applied to the first and second tiers and nodes are applicable to the third and fourth tiers and nodes.

Claims 58 and 59 recite that "the second tier includes a product line" and "the product line includes zero or more product nodes." If the product line includes zero nodes, then the second tier effectively possesses no product line, thereby negating this limitation in claims 58 and 59. Consequently, it should be noted that the prior art does not need to address the details of a product line.

Claim 60 is dependent from claim 45 and recites that "the first customer tier includes a region level, and wherein the second customer tier includes a country level that includes at least one customer node, and wherein the first product tier includes a product family level, and wherein the second product tier includes a line level that includes at least one product node." While the tiers are defined as various levels and nodes, the number of tiers or nodes in the hierarchy does not readily change how a user

accesses data, at least within the scope of the claim. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art.

Claim 61 recites the step of "identifying, from a plurality of products, one or more products associated with a particular user, wherein identifying includes selecting one or more product nodes from a plurality of product nodes arranged in a product data hierarchy, wherein the product data hierarchy includes a product family tier and a product line tier, wherein each node in the product line tier is associated with one or more nodes in the product family tier." Again, the details of how the hierarchy is formed do not affect the steps of identifying or allowing and are outside the scope of the invention. The identifying and allowing steps rely on the identification of a product associated with a user and are unaffected by how the product data is arranged in a hierarchy. Consequently, since this limitation does not affect the scope of the claim as a whole, it does not patentably distinguish the claimed invention over the prior art.

Furthermore, the claimed invention recited throughout claims 25, 27-35, 37-45, 47, 49, and 52-61 repeatedly defines an arrangement of data comprising one or two data hierarchies, each of which comprises a plurality of tiers, each tier comprising one or more nodes. These claims also allow a user to access forecast data associated with a customer and one or more products. Similarly, column 9, line 5 through column 12, line 29 of Sultan disclose that a supervisor or other employee may access a forecast for the sales of a particular product. Various available forecasts may be rolled-up to form an overall forecast. For example, forecasts for products in a family of products (e.g.,

Widgets1 and Widgets 2 in a widget family) may break forecasts down into each product or may be grouped together to view forecasts related to the product family. Also, forecasts may be rolled-up and broken-down based on other factors, such as by account supervisor(s), geographical area(s), or across divisions. Therefore, Sultan's forecasts are generated based on a hierarchy of product data divided into various tiers, levels, and nodes. Sales information may also be accepted and converted into a plurality of currencies (column 2, lines 38-57).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Susanna Diaz

Susanna M. Diaz
Primary Examiner
Art Unit 3694

February 20, 2007